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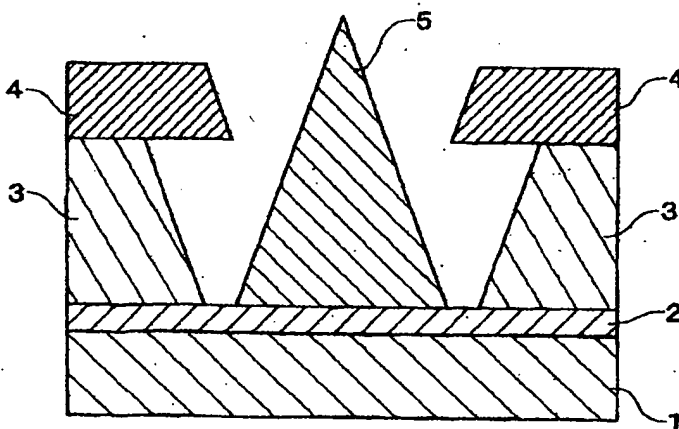
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(54) **Graphite nanofibers and their use**

(57) A graphite nanofiber material herein provided has a cylindrical structure in which graphene sheets each having an ice-cream cone-like shape whose tip is cut off are put in layers through catalytic metal particles; or a structure in which small pieces of graphene sheets having a shape adapted for the facial shape of a catalytic metal particle are put on top of each other through the

catalytic metal particles. The catalytic metal comprises Fe, Co or an alloy including at least one of these metals. The material can be used for producing an electron-emitting source, a display element, which is designed in such a manner that only a desired portion of a luminous body emits light, a negative electrode carbonaceous material for batteries and a lithium ion secondary battery.

**FIG.1**





European Patent  
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# EUROPEAN SEARCH REPORT

Application Number  
EP 01 10 2417

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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			D01F H01J
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>28 November 2001</b>	Examiner <b>Tarrida Torrell, J</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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